

REMARKS

The Examiner has rejected the claims based on Williams in view of Hamlin in view of Willis. The applicant respectfully traverses this objection.

The claimed system is a user-controlled **unicast** system and patentably distinct from the cited references and the combination thereof. The Examiner has now cited Williams as a primary reference, asserting that Williams discloses all elements of claim 1 except for at least one switching device for routing the channel selection in the format of an internet protocol.

With respect, this is incorrect. Williams is not a unicast system. Williams does not, as asserted, teach “outputting an output signal containing the user-selected channel only to the user’s premises” as claimed.

The embodiment referenced by the Examiner in this regard is Figure 24 (the channel server 200). But column 18, lines 4 to 13 cited by the Examiner does not teach “outputting an output signal containing the user-selected channel only to the user’s premises”; it teaches that the redistributor sends into the user’s premises all user-selected channels requested by all users over a single channel transport bus.

For example, in column 17, lines 60 to 65, Williams states:

“...the channel server of the present invention filters out all TV channels except those which are actually being viewed from a client system. Thus, if only 5 TVs are being watched, for example, then only 5 TV channels are transmitted onto the coaxial cable bus 65.”

At column 18, lines 58 to 63, Williams states:

“Each of the tuner/modulators 195 outputs a demodulated cable TV signal on a particular channel to mapping unit 194. Mapping unit 194 maps each demodulated TV channel to an available internal network RF channel 202 and transmits the signal onto the channel transport 196 using the assigned internal channel.”

As clearly illustrated in Williams' Figure 24, all CATV channels are output to all users over a common coaxial cable bus (or 'channel transport'). Thus, all user-requested channels 202 are transmitted to **all users** over the common coaxial cable bus. To **view** only the user-selected content, the user's communications interface (STB) is tuned to the channel assigned by the mapping system (193, 194, 195). But **all channels requested by all users on that cable bus are transmitted to all users on that cable bus.**

Williams thus clearly teaches that **all requested TV channels are transmitted to all users on the network via the channel transport 196 (coaxial cable bus 65).** Williams does not route to a user only the specific signal requested by the user as claimed. Williams does not segregate the user-selected content from the content selected by other users in the system; *he merely blocks channels that have not been requested by any user from the common cable bus.*

Williams does assign a separate tuner to each TV watcher (col. 18, lines 4-5), and in the channel server embodiment Williams has the ability to filter out unwatched stations so that unrequested channels are withheld from the coaxial cable bus 65 (col. 17, lines 60-63). The client side of Williams' system tunes to the mapped channel so that only the user who requested that particular channel has access to that portion of the signal being transmitted through the coaxial cable bus 65. But ultimately, all user-requested channels are sent to all users on that cable bus, and channel discrimination (i.e. tuning) for each user occurs **at the client end**. Thus, while Williams may provide some reduction in bandwidth by withholding unrequested channels available to the channel server from the channel bus, this is dependent upon the number of users making requests at any one time, because all requested signals will be sent to all users – which is why Williams' channel transport bus has to be a data-heavy medium such as coaxial cable.

The redistributor of the present invention **outputs the user-selected channel only to the user.** In a multi-user system, this significantly reduces the bandwidth required for the delivery of channels to users and allows a data-heavy signal such as video (even high definition video) to be transmitted over a low bandwidth medium, such as twisted pair wiring. By segregating the user-selected signal and transmitting it from the redistributor solely to the user, a broadband medium such as coaxial cable is not required in the so-called 'last mile' of the distribution network for today's typical channel content.

The invention also has utility where the 'last mile' is a higher bandwidth medium, such as coaxial cable, in that the channel requested by the user could be more data-intensive than a single HD video signal, or the control signals sent upstream may be more involved than mere channel requests (e.g. in the case of interactive television or gaming) and may require more bandwidth, so being able to segregate user-requested signals to different signal pathways may be beneficial even where twisted-pair wiring is not used. However, the fact that the invention allows data-heavy signals such as high definition video to be transmitted over a low bandwidth medium such as twisted pair wiring is itself a tremendous advantage, arising because of the separate signal pathways between the head end and the various subscribers on the network.

With respect, the Examiner has failed to find any prior art which teaches this feature or provides this advantage of the invention. The applicant thus submits that the present claims are allowable.

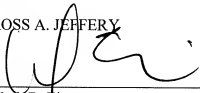
The applicant notes that Williams also does not provide a processor for processing the signals for switching. The Examiner has indicated that part 208 in Figure 25 is a "processor for processing the signals for switching," however it is merely a network interface (col. 20, lines 15-16). The network interface 208 does not process the a/v signal for switching, it is merely couples a microcontroller to the coaxial cable bus which allows the channel server to communicate on the network channel (col. 19, lines 62-65, Figure 25). This feature also helps to distinguish the invention from the prior art.

Favourable reconsideration and allowance of this application are respectfully requested.

A Petition for an Extension of Time requesting an extension of three months for filing the subject response is attached. The Commissioner is authorized to charge any deficiency or credit any overpayment in the fees for same to our Deposit Account No. 500663.

Executed at Toronto, Ontario, Canada, on August 17, 2010.

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Att. Petition for Extension of Time